10/695,892
12-15-03

L7 ANSWER 30 OF 111 CA COPYRIGHT 2003 ACS
AN 134:58006 CA
TI Waterproof and thermally insulating white elastic coatings
IN Yang, Dingzhong; Liu, Enlin
PA Chongqing Yangcai Industry Co., Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 8 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
IC ICM C09D121-02
CC 42-10 (Coatings, Inks, and Related Products)
Section cross-reference(s): 39, 58
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1250071	A	20000412	CN 1999-115155	19990921
PRAI	CN 1998-124050	A	19981231		

AB Title coatings, useful for roofs, comprise synthetic rubber latexes 35-50, hollow **microspheres** 15-40, pigments and fillers 10-25, antiseptics or fungicides 0.2-0.3, wetting agents 0.1-0.3, vulcanizers 1.0-3.5, antioxidants 0.2-0.5, tackifiers 3.0-5.0, accelerators 0.2-0.5, pH adjusters 0.01-0.1%, and **water**. The above coating could also contain dispersants, defoamers, antifreezing agents, thickeners, and hydrophobic agents. A typical coating comprised 55% SBR/butyl rubber blend-contg. **latex** 35, hollow ceramic beads 40, pigment/filler 10, KTPP (dispersant) 0.1, Triton X 405 0.2, ZnO/MgO 1.0, Antioxidant 264 0.2, an EVA emulsion 5.0, Nocceler DM 0.1, BYK 034 0.2, M 8 (fungicide) 0.3, Rhoplex TT 935 0.4, ethylene glycol 0.5, BS 1306 1.0, and **water** 6% with 0.01 part 35% **water glass** soln.
ST waterproof thermal insulating white rubber coating roof
IT Polysiloxanes, uses
RL: MOA (Modifier or additive use); USES (Uses)

L7 ANSWER 51 OF 111 CA COPYRIGHT 2003 ACS
AN 129:332986 CA
TI Explosive based on **water**-in fuel emulsion of ammonium nitrate and sodium nitrate
IN Beitia Gomez de Segura, Fernando; Quintana Angulo, Jose Ramon; Gonzalez Ocejo, Agustin
PA Union Espanola De Explosivos, S.A., Spain
SO Span., 8 pp.
CODEN: SPXXAD
DT Patent
LA Spanish
IC ICM C06B031-28
CC 50-4 (Propellants and Explosives)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	ES 2114781	A1	19980601	ES 1994-2467	19941130
	ES 2114781	B1	19990401		
PRAI	ES 1994-2467		19941130		

AB The detonator-sensitive explosive comprises an aq. soln. contg. 50-70% ammonium nitrate and sodium nitrate in discontinuous phase where the **water** content is 13-25%, 2-20% combustible org. phase, 0.2-7% emulsifier, a gas, and less than 30% cooling reagents, where the proportion of oxidating salts in the formulation is 50-90%. The emulsion explosive is sensitized by incorporation of a gas attained by injection of air, use of gas generating reactions, or use of hollow particles, to a final d. of 0.5 to 1.4 g/cm3. The material is shaped in the form of a cartridge wrapped in paper and the formulation is obtained by prepg. the aq. soln. of nitrate salts and the org. phase with or without emulsifier, mixing, dispersing hollow particles in the emulsion or injecting air, adding cooling agents, and loading the cartridge. Thus, a formulation contg. ammonium nitrate, sodium nitrate, **water**, sorbitan monooleate, cryst. wax, and **glass microspheres** was obtained by mixing pre-prepd. phases, dispersing **glass microspheres** to achieve a d. of 1.15 g/cm3; the final explosive was packed in a paper cartridge. The explosive cartridge had detonation rate of 4800 m/s, explosive power of 60%, and short mortar test of 1/10 and is suitable for use in flammable environments, e.g., underground **coal** mines.
ST ammonium nitrate **water** oil emulsion explosive; **glass**

L7 ANSWER 55 OF 111 CA COPYRIGHT 2003 ACS
AN 128:78953 CA
TI Cementing compositions for cementing oil (or similar) wells, and their use in arctic zones and deep-**water** wells
IN Villar, John; Baret, Jean-francois; Michaux, Michel; Dargoud, Bernard
PA Sofitech N.V., Belg.
SO Eur. Pat. Appl., 18 pp.
CODEN: EPXXDW
DT Patent
LA English
IC ICM C04B028-06
ICS C04B038-00; E21B033-13
CC 58-3 (Cement, Concrete, and Related Building Materials)
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 814067	A1	19971229	EP 1997-401376	19970617
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	FR 2749844	A1	19971219	FR 1997-1849	19970212
	FR 2749844	B1	19981030		
	NO 9702799	A	19971219	NO 1997-2799	19970617
	BR 9703615	A	20011127	BR 1997-3615	19970617
PRAI	FR 1996-7544	A	19960618		
	FR 1997-1849	A	19970212		
	FR 1996-7554	A	19960618		

AB The compns. comprise a medium component and contain at least aluminous cement, fine particles, and a lightwt. material, i.e., hollow **microspheres**, **water** to give porosity of 25-50, preferably 30-40%, and a dispersant, setting accelerator, and, optionally, conventional additives. The compns. are used for cementing conductor pipes in arctic zones and in deep-**water** wells. A mixt. consisting of aluminous cement 40, Cenospheres (hollow **glass microspheres**) 50, and finely ground quartz 10 vol.%, and citric acid (dispersant) 1, and Li2CO3 (accelerator) 0.01 g/600 mL gave plastic viscosity 204 cP, yield point 4.2 lb/100 ft2, free **water** 0 mL, and thickening time 5 h 30 min.
ST cementing oil well arctic deep **water**; aluminous cement cementing oil well; fine quartz aluminous cement; silica flour aluminous cement; lightwt aggregate filler aluminous cement; hollow **glass microsphere** lightwt filler; Cenosphere hollow **glass microsphere**; dispersant setting accelerator cement; citric acid dispersant; polynaphthalenesulfonate dispersant; polymelaminesulfonate dispersant; nitrogen porous cement; butadiene styrene **latex** lightwt aggregate; lithium carbonate setting accelerator; antifoaming agent **latex** aggregate
IT Setting agents

L7 ANSWER 70 OF 111 CA COPYRIGHT 2003 ACS
AN 123:16198 CA
TI Two-component rapid-setting mortar systems based on a hydraulic binder and additives, especially for anchor bolts
IN Weber, Christian; Gruen, Juergen
PA UPAT GmbH and Co., Germany
SO Eur. Pat. Appl., 8 pp.
CODEN: EPXXDW
DT Patent
LA German
IC ICM C04B028-04
ICS C04B024-24; C04B040-00
CC 58-3 (Cement, Concrete, and Related Building Materials)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 650942	A1	19950503	EP 1994-116061	19941012
	EP 650942	B1	19980617		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IE, IT, LI, NL, SE				
	DE 4337264	A1	19950504	DE 1993-4337264	19931102
	AT 167465	E	19980715	AT 1994-116061	19941012
	ES 2119043	T3	19981001	ES 1994-116061	19941012
PRAI	DE 1993-4337264		19931102		

AB The mortar is addnl. mixed with an alkali-resistant, radical-hardening resin. These rapid-setting compns. have high strength. A mixt. consisting of aluminous cement type 1 (Al2O3 50.4, CaO 36.6, SiO2 6.7 wt. parts) 20, type 2 (Al2O3 71, CaO 27 wt. parts) 20, sand (0.04-0.15) 30 and (0.08-0.2) 30, o-phthalic acid ester soln. in styrene (60 wt.%) 100, dimethyl-p-toluidine 0.3, diethyleneanilin 0.4 (as accelerators), SiO2 fume (thixotropic agent) 2.0, ethoxylated alkylphenol (emulsifier) 1.5, dibenzoyl peroxide 4, **water** 38, hollow **glass microspheres** 1.1, polymethylmethacrylate 34, Na3PO4 12, methylhydroxyxcellulose 0.9, and ethyleneglycol 10 wt. parts gave 1-h pull-out strength 60 kN.
ST cement resin anchor bolt mortar; aluminous cement anchor bolt mortar; portland cement anchor bolt mortar; rapid setting mortar anchor bolt; radical polymg resin mortar
IT Filling materials

L4 ANSWER 8 OF 36 CA COPYRIGHT 2003 ACS
AN 132:184478 CA
TI Refractory powder composition containing an **aqueous** binder, and its applications
IN Frot, Didier; Frot, Nadine
PA Fr.
SO Fr. Demande, 14 pp.
CODEN: FRXXBL
DT Patent
LA French
IC ICM C04B035-78
ICS C04B035-66; C04B035-14; B28B007-34
ICA A61C005-08
CC 57-6 (Ceramics)
Section cross-reference(s): 55, 56, 63
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2779425	A1	19991210	FR 1998-7070	19980605
	FR 2779425	B1	20000728		
PRAI	FR 1998-7070		19980605		

AB A refractory powder compn. is described for use with an aq. binder and contg. 1-70 wt.% particulate cellular refractory material having granulometry <200 .mu.m and d. <0.9, for example, perlite or **glass microspheres**. The refractory material is suitable for use in a lost-wax process foundry such as for dental prostheses and silver- and goldsmiths or jewelry. Such a refractory powder has compn. magnesium oxide 2-8, monobasic ammonium orthophosphate 20-30, silica (10-300 .mu.m) 0-80, particulate cellular refractory material 1-70, additives .ltoreq.2 wt.%. In the compn., 3-10 wt.% of the silica can be replaced by zirconium oxide, molochite or kaolin. The additives may consist of pigments and/or up to 0.1 % citric acid and/or up to 0.1 % borax and/or up to 0.1 % sodium silicate. The aq. binder may be **water** and/or an aq. **suspension** of 30 % colloidal silica. The particulate cellular material may consist of **glass microspheres**, contg. 0.02-1 % synthetic amorphous silica. The silica content of the compn. increases with the granulometry of the cellular particulate material. The compn. may contain two types of **glass microspheres**, one of lower mean diam. (more dense - d. of 0.1-0.15) and the other of relatively large diam. (less dense - d. 0.2-0.25). Molded articles are prepd. using the refractory powder compn. mixed with aq. binder to a fluid paste, pouring the paste into a mold contg. an impression in wax, allowing the mixt. to set, heating the block obtained in a furnace such that the wax melts and leaves a cavity. The mold having a hollow cavity thus formed can be used as a mold for molten metal or ceramic.

ST refractory powder compn aq binder lost wax process mold

L4 ANSWER 3 OF 36 CA COPYRIGHT 2003 ACS
AN 137:59005 CA
TI **Aqueous** agrochemical suspensions containing floating hollow particle carriers
IN Takahashi, Takehisa; Fujii, Shinya
PA E.I. Du Pont De Nemours and Co., USA
SO Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
IC ICM A01N025-04
ICS A01N025-12; A01N037-22; A01N043-653; A01N047-12; A01N047-30; A01N047-36; A01N047-38; A01N057-18
CC 5-3 (Agrochemical Bioregulators)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002193701	A2	20020710	JP 2000-374884	20001208
PRAI	JP 2000-374884		20001208		

AB The suspensions, which show good **water** dispersibility and spreading property, contain agrochem. active ingredients and floating hollow particle carriers having av. particle size .ltoreq.300 .mu.m to control sp. gr. of the prepns. A slurry contg. H2O 69.4, pyributicarb 12.5, 50% Newkalgen FS-3 (propylene glycol soln.) 2, Pluronic L 61 2, propylene glycol 5, and Antifoam E 20 0.1 part was mixed with 2% xanthan gum soln. 5, 5% bentonite soln. 2, and **Glass** Bubbles K 15 (floating hollow particles) 2 parts to give aq. **suspension** for direct application to paddy.
ST agrochem aq **suspension** hollow particle carrier; **glass microsphere** carrier agrochem aq **suspension**
IT **Glass microspheres**
RL: AGR (Agricultural use); MOA (Modifier or additive use); BIOL (Biological study); USES (Uses)
(**Glass** Bubbles S 22, **Glass** Bubbles K 15; aq. agrochem. suspensions contg. floating hollow particle carriers to control sp. gr.)